

**CLAIMS****WHAT IS CLAIMED:**

1. A method, comprising:  
receiving data indicative of light conditions proximate to a visual presentation device;  
5 receiving data associated with at least one visibility profile; and  
determining visual data to be displayed by the visual presentation device based on at least  
a portion of the received data indicative of the light conditions and at least a portion of the  
received data associated with the at least one visibility profile.
2. The method of claim 1, wherein receiving the data indicative of light conditions  
10 proximate to the visual presentation device comprises determining at least one of an ambient  
light intensity and an ambient light spectrum.
3. The method of claim 2, wherein receiving the at least one visibility profile comprises  
receiving an indication of at least one deficiency in vision of a user.
4. The method of claim 3, wherein determining visual data to be displayed by the visual  
15 presentation device comprises comparing the indication of the at least one vision deficiency and  
at least one of the ambient light intensity and the ambient light spectrum.
5. The method of claim 4, wherein determining the visual data comprises determining at  
least one of a desired background color, foreground color, brightness, contrast, size, and font.
6. The method of claim 1, further comprising requesting the information to be displayed on  
20 the visual presentation device from a remote server.

7. The method of claim 1, wherein receiving the visibility profile comprises receiving at least one of a user profile and a device profile, and receiving the visibility profile comprises receiving at least one of a Composite Capabilities/Preferences Profile and a Learner Profile.

8. The method of claim 1, wherein determining the visual data to be displayed by the visual presentation device comprises determining the visual data using a processor-based device located remotely from the presentation device and providing the visual data from the processor-based device to the visual presentation device.

9. The method of claim 8, wherein requesting the information comprises providing at least one of a user identification number, a name, a username, an alias, a federated identification, and a password to the remote server.

10. The method of claim 1, further comprising determining that a new user is using the visual presentation device and receiving the visibility profile in response to determining that the new user is using the visual presentation device.

11. An apparatus, comprising:

an interface; and

a control unit communicatively coupled to the interface and adapted to:

receive data indicative of light conditions proximate to a visual presentation device;

receive data associated with at least one visibility profile; and

determine visual data to be displayed by the visual presentation device based on at least a portion of the received data indicative of light conditions and at

least a portion of the received data associated with the at least one visibility profile.

12. The apparatus of claim 11, wherein the control unit is adapted to determine at least one of an ambient light intensity and an ambient light spectrum.

5 13. The apparatus of claim 12, wherein the control unit is adapted to receive an indication of at least one deficiency in vision of a user.

14. The apparatus of claim 13, wherein the control unit is adapted to compare the indication of at least one deficiency in the vision of the user and at least one of the ambient light intensity and the ambient light spectrum.

10 15. The apparatus of claim 14, wherein the control unit is adapted to determine at least one of a desired background color, foreground color, brightness, contrast, size, and font.

16. The apparatus of claim 11, further comprising at least one visual presentation device adapted to display the determined visual data.

15 17. The apparatus of claim 16, wherein the visual presentation device is at least one of a personal data assistant, a laptop computer, a desktop computer, a cellular telephone, a global positioning system, an automobile navigation system, a projection device, and a television.

18. The apparatus of claim 11, further comprising at least one detector for acquiring the data indicative of light conditions proximate to the at least one visual presentation device.

19. An apparatus, comprising:

means for receiving data indicative of light conditions proximate to a visual presentation device;

means for receiving data associated with at least one visibility profile; and

means for determining visual data to be displayed by the visual presentation device based  
5 on at least a portion of the received data indicative of light conditions and at least a portion of the data associated with the at least one visibility profile.

20. A system, comprising:

at least one visual presentation device adapted to display visual data;

at least one storage device adapted to store at least one visibility profile;

10 at least one detector for acquiring data indicative of light conditions proximate to the at least one visual presentation device; and

a processor-based device adapted to:

receive the data indicative of light conditions proximate to the visual presentation device;

15 receive data associated with at least one visibility profile; and

determine the visual data to be displayed by the visual presentation device based on at least a portion of the received data indicative of light conditions and at least a portion of the received data associated with the at least one visibility profile.

20 21. The system of claim 20, wherein the visual presentation device is at least one of a personal data assistant, a laptop computer, a desktop computer, a cellular telephone, a global positioning system, an automobile navigation system, a projection device, and a television.

22. The system of claim 20, further comprising a plurality of visual presentation devices.

23. The system of claim 20, further comprising a plurality of detectors deployed proximate to the plurality of visual presentation devices.

24. The system of claim 20, wherein the at least one storage device is adapted to store at least one user profile database containing the at least one user profile, and wherein the visibility profile comprises at least one of a user profile and a device profile.

25. A computer program product in a computer readable medium which when executed by a processor performs the steps comprising:

receiving the data indicative of light conditions proximate to the visual presentation device;

receiving data associated with at least one visibility profile; and

determining visual data to be displayed by the visual presentation device based on at least a portion of the received data indicative of light conditions and at least a portion of the received data associated with the at least one visibility profile.

26. The product of claim 25, wherein the computer program product when executed by the processor performs the steps comprising determining at least one of an ambient light intensity and an ambient light spectrum.

27. The product of claim 25, wherein the computer program product when executed by the processor performs the steps comprising receiving an indication of at least one deficiency in a user's vision.

28. The product of claim 25, wherein the computer program product when executed by the processor performs the steps comprising comparing the indication of at least one deficiency in vision of a user and at least one of the ambient light intensity and the ambient light spectrum.

29. The product of claim 25, wherein the computer program product when executed by the  
5 processor performs the steps comprising determining at least one of a desired background color, foreground color, brightness, contrast, size, and font.